

**Notes on some chalcid flies reared from *Buprestidae*
and *Bostrychidae*, injurious to *Acacia raddiana* Savi
in Algeria (Sahara) and North Tchad**

(Hym. Chalcidoidea)

BY

KARL-JOHAN HEDQVIST.

Estocolmo.

From Mr. J. Mateu, Paris, I have received a small collection of chalcids reared from woodboring beetles belonging to the families *Buprestidae* and *Bostrychidae*. These beetles have been injurious to *Acacia raddiana* Savi in some places in Algeria (Sahara) and North Tchad. The collection comprises of 6 species belonging to *Chalcididae*, *Eurytomidae* and *Cleonymidae*. Five species proved to be new species and for one of them I had to create a new genus.

Family **CHALCIDIDAE**.

Subfamily **HALTICHELLINAE**.

***Tanycoryphus saharensis* sp. nov.**

♀. Black, with antennal sockets, 1st-4th funicle joints, tegula, fore and mid femora, all tibiae, and tarsi and apex of hind femur reddish brown. All claws dark brown. Wing veins dark brown.

Head (Fig. 1 A) as wide as thorax. Antennae inserted on a level below anterior margin of eyes. Antenna (fig. 1 C) with annellus nearly as long as pedicel, 1st funicle joint twice as long as pedicel. The club with apex square. Clypeus with anterior margin arcuate. Malar space $\frac{3}{4}$ of the breadth of an eye, the eye surrounded by an crenulate orbital carina. Thorax with strong reticulation (partly umbellicate). Prepectus small (fig. 1 D), propodeum strongly reticulated. Gaster short as long as thorax + propodeum. Fore femur swollen, hind

femur (fig. 1 B) with large tooth and finely serrate. Hind tibia (fig. 1B) truncate with one spur. Fore wing with postmarginal vein somewhat longer than stigmal vein.

♂. Unknown.

Length: ♀. 4,0 mm.

Holotype: in the collection of Muséum National d'H. N. de Paris.

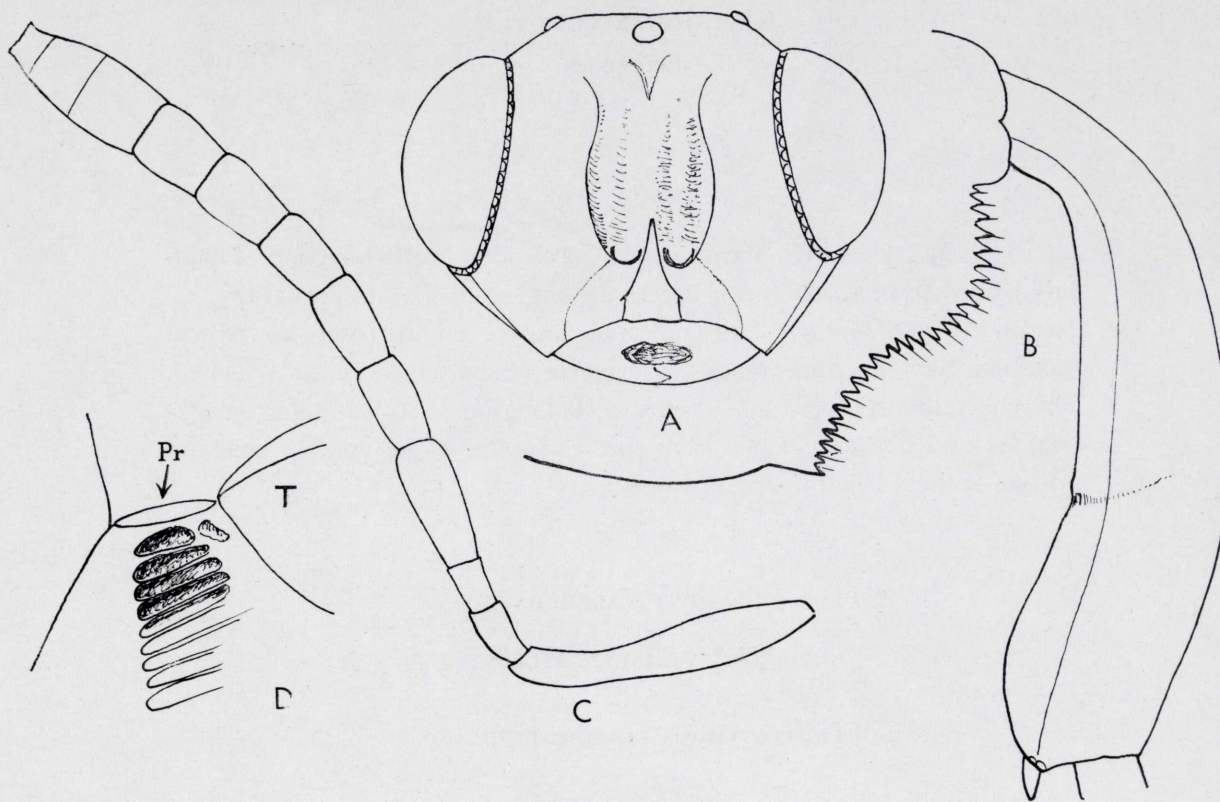


Fig. 1.—*Tancoryphus saharensis* sp. nov.: A) Head in frontal view; B) Ventral part of hind femur and hind tibia; C) Antenna; D) Prepectus (Pr) and part of mesopleuron (T = tegula).

Timesdelssine, Hoggar, Sahara central, leg. J. Mateu. "Bois sec *Acacia raddiana* parasité *Anthaxia*".

I prefer to place this new species in the genus *Tancoryphus* Cam., notwithstanding it has some characters to create a new genus. The new species is in some respect similar to *Chirocera* Latr. but the latter has not fore femur swollen as in the new species. Among the species

of *Tanycoryphus* Cam. the species is most similar to *T. conglobatus* Steff. but differs by having wing veins differently, scutellum not convex and the apex of hind tibia truncate in an other way (fig. 1 B). The species of *Tanycoryphus* Cam. are known as parasite of woodbor-ing beetles. *T. sericatus* Steff. is known from Tibesti (Tchad) as a parasite of *Zygopinae* (Col. Curculionidae) living on *Acacia raddiana* Savi. The latter species, however, is quite different.

Family EURYTOMIDAE.

Subfamily EURYTOMINAE.

Eurytoma acaciicola sp. nov.

♀. Black, with antenna yellowish brown. Pedicel brown. Fore leg with knee, base and apex of tibia and tarsus yellowish brown, the middle of tibia and claw-joint dark brown. Mid leg with femur and tibia dark brown, the knee, base and tip of tibia yellowish brown, tarsus yellowish white except claw-joint which is brown. Hind leg black with trochanters and tibia pale brown, knee yellowish brown and tarsus yellowish white except claw-joint which is brown. Wing veins very pale yellow.

Head (fig. 2 A) semiglobular. Antennae inserted just above a level with anterior margin of eyes. Antennae (fig. 2 D) broken but the scape reach nearly mid ocellus. Anterior margin of clypeus straight. Malar space nearly as the breadth of an eye. Along by the genal suture an area with very fine reticulation. Ocelli in an equilateral triangle. Prepectus see fig. 2 E. Head and thorax with umbellicate puncturation, successively stronger and strongest on scutellum. Propodeum with a wide and shallow excavation in the middle. Head and thorax + propodeum with scattered white hairs, very dense on callus and metapleura. Petiole short, gaster (fig. 2 C) with 3rd tergite somewhat longer than 4th tergite. Gaster with fine puncturation except on a narrow posterior border of each tergite which are smooth. Fore wing nude of the basal part, marginal vein short, shorter than stigmal vein, the latter nearly as long as postmarginal vein (fig. 2 B).

♂. Similar to the female but tibiae darker brown in the middle. Also the antennae broken of the male.

Length: ♀ . 3,0-3,1 mm; ♂ . 2,4-2,6 mm.

Holotype: in the collection of Muséum National d'H. N. de Paris.
Qued Harischi, Ennedi N. Tchad, 1.XII.1956, leg. J. Mateu. "*Acacia raddiana* Savi bois sec".

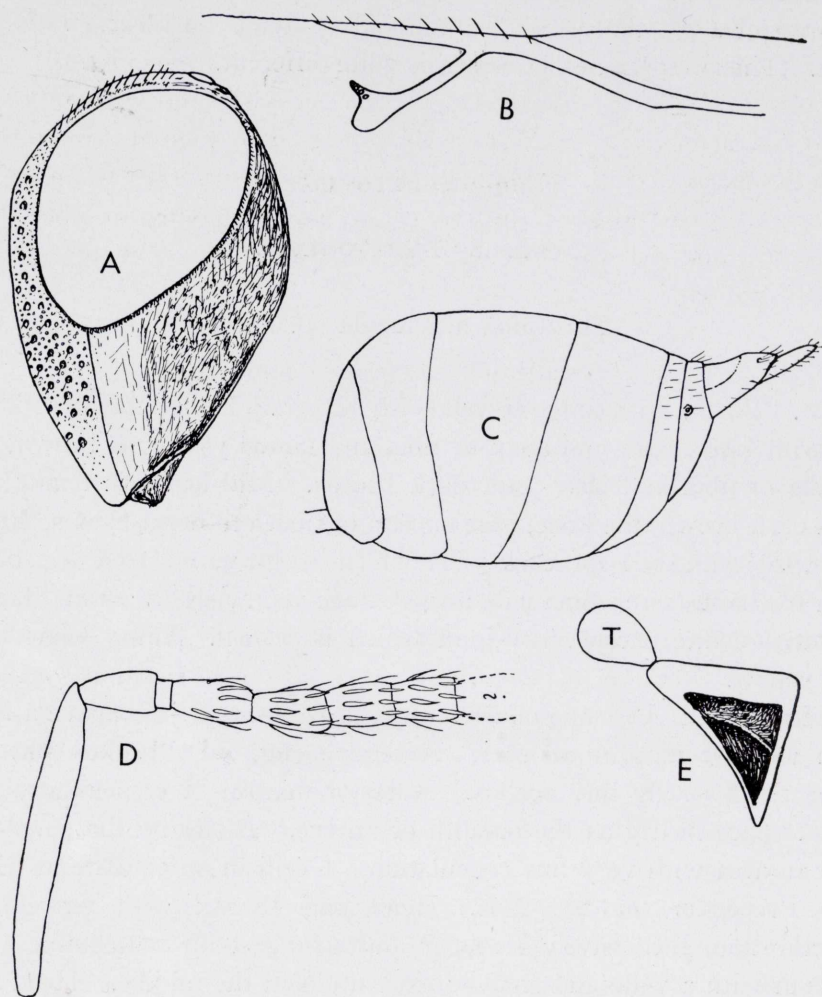


Fig. 2.—*Eurytoma acaciicola* sp. nov.: A) Head in lateral view; B) Part of fore wing with veins; C) Gaster in lateral view; D) Antenna; E) Prepectus (T = tegula).

Paratype: 2 ♀♀ + 2 ♂♂; 1 ♀ + 1 ♂ in the same coll. as holotype 1 ♀ -1 ♂ in coll. mea.

Locality: 1 ♀ Qued Harischi, Ennedi, N. Tchad, 5.XII.1958, leg. J. Mateu.

Ex *Acacia raddiana* Savi, parasite on *Anthaxia pumila* Hg. and *A. angustipennis* Klug.

1 ♀ From the same locality as holotype.

2 ♂ ♂ Qued Trick, Saoura, Sahara, N. O., 26.IV.1961, leg. J. Mateu. "eclos au Lobo, bois sec *Acacia raddiana* Savi parasité par *Anthaxia* et *Acmaeodera*".

E. acaciicola sp. nov. belongs to a group of *Eurytoma* Ill. which comprises of following species: *E. bambeyi* Risb. and *E. lepidopterae* Risb. characterized by marginal vein shorter than stigmal vein and propodeum excavated in the middle. From *E. bambeyi* Risb. and *E. lepidopterae* Risb. differs *E. acaciicola* sp. nov. by having an other shape of pedicel and the length of tergites of gaster is an other, also the colour is different.

***Eurytoma mateui* sp. nov.**

♀. Black, with scape of antenna yellowish brown, the rest of antenna dark brown. Legs with coxae black, femora and tibiae in the middle brown. Knee, base and tip of tibiae and tarsi yellowish white. Wing veins pale yellow.

Head (fig. 3 A) semiglobular. Antennae (fig. 3 C) inserted in the middle of face. Scape reach mid ocellus, funicle joints longer than wide with two lines of rhinariae. Clypeus anterior margin somewhat sinuated. Between clypeus and antennal sockets a smooth area and towards clypeus converging striation. Along by the genal suture a smooth area with very fine reticulation. Malar space as long as half the breadth of an eye. Inner orbit with a fine keel. Vertex, thorax and propodeum except in the middle with umbellicate puncture. Propodeum in the middle with a wide excavation, smooth and irregular reticulated. Prepectus see fig. 3 D. Petiole transverse. Gaster (fig. 3 E) with 4th tergite longest. Fore wing with marginal vein (fig. 3 B) very short much shorter than stigmal vein, the latter shorter than postmarginal vein ($m:s:pm = 1,5:3,5:7$).

♂. Similar to female but femora dark brown-black. Marginal vein longer ($m:s:pm = 2:3:7$).

Length: ♀. 4,0-4,4 mm; ♂. 3,1 mm.

Holotype: in the collection of Muséum National d'H. N. de Paris.

Qued el Arfejd, Saoura, Algeria, 18.IV.1962, leg. J. Mateu. "eclos du bois mort *Acacia raddiana*".

Paratype: 1 ♀ + 1 ♂.

1 ♂ in the same coll. as holotype. Chab't el Karkor, Sahara, Nord occidental (Dep. Saoura, Algeria) 2.II.1961, leg. J. Mateu. "Bois mort *Acacia raddiana* parasité Buprestid".

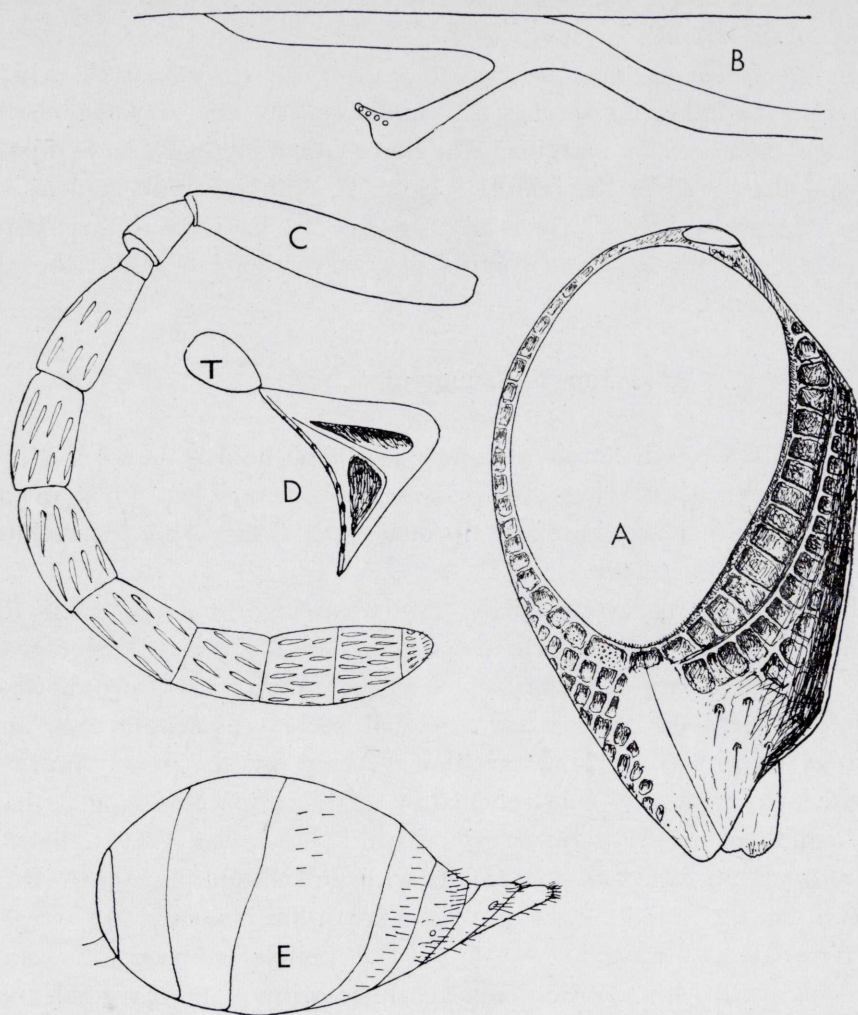


Fig. 3.—*Eurytoma mateui* sp. nov.: A) Head in lateral view; B) Part of fore wing with veins; C) Antenna; D) Prepectus (T = tegula); E) Gaster in lateral view.

1 ♀ in coll. mea.

Qued Trick, Sahara Nord occidental (Dep. Saoura, Algeria) 22.IV. 1961, leg. J. Mateu. "Éclos bois mort *Acacia raddiana*".

This new species belongs to the same group as *E. acaciicola* sp. nov.

according to wing veins and propodeum. It differs by having an other more compact antenna, different sculpture of head and a very short marginal vein.

***Eurytoma saharensis* sp. nov.**

♀. Black with scape of antenna yellow, pedicel dark brown and

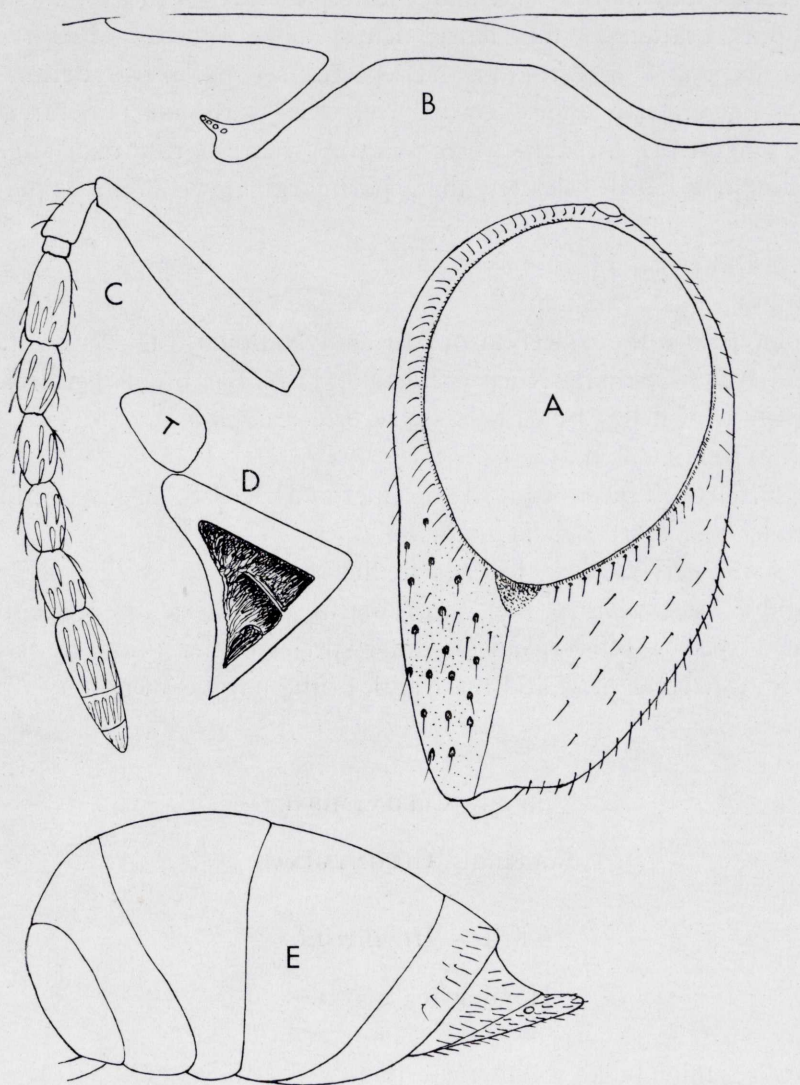


Fig. 4.—*Eurytoma saharensis* sp. nov.: A) Head in lateral view; B) Part of fore wing with veins; C) Antenna; D) Prepectus (T = tegula); E) Gaster in lateral view.

the rest of antenna brown. Legs with trochanters, knees, base and tip of tibiae and tarsi yellowish brown. Wing veins very pale yellow.

Head (fig. 4 A) nearly transverse. Clypeus smooth and with anterior margin nearly straight. Between clypeus base and antennal sockets a very weak longitudinal keel. Antennae (fig. 4 C) inserted in the middle of face. Scape long, reach mid ocellus, 1st funicle joint longer than pedicel. Malar space as long as the breadth of an eye. Face, vertex and thorax with umbellicate puncture. All over the head and thorax scattered white hairs, denser along sutures. Propodeum shallow excavated and rugulos. Prepectus see fig. 4 D. Petiole somewhat longer than wide. Gaster (fig. 4 E) with fine puncture, 4th tergite longest. Fore wing with marginal vein shorter than stigmal, the latter (fig. 4 B) shorter than postmarginal vein ($m:s:pm = 3:4:5,5$).

♂. Unknown.

Length: ♀. 2,7-3,5 mm.

Holotype: in the collection of Muséum National d'H. N. de Paris. Béni-Abbès, Sahara Nord occidental, Dep. Saoura, Algeria. 4.IV. 1964, leg. J. Mateu. "Eclos bois sec *Acacia raddiana*".

Paratype: in coll. mea. (♀).

Bagueleilai, Trarza Mauritanie mér., 31.I.1958, leg. J. Mateu. "Eclos le bois mort *Acacia raddiana*".

E. saharensis sp. nov. belongs to the same group as *E. mateui* sp. nov. and *E. acaciicola* sp. nov. according to wing veins and propodeum. This new species differs from the other species of this group by having a nearly transverse head and the length of the tergites of gaster.

Family CLEONYMIDAE.

Subfamily CLEONYMINAE.

Tribus Heydenini.

Heydenisca gen. nov.

Head semiglobular. Antennal furrows shallow and short. Antennae inserted just below a level with anterior margin of eyes. Ocelli in an equilateral triangle. Eye oval. Clypeus anterior margin weak sinuated. Labrum not visible. Antenna (♂) 11173, the female has

broken antennae, funicle joints with many rhinariae. Pronotum long, anterior part neck-shaped. Notaulices faintly indicated anterior. Prepectus large, displaced to the ventral side. Propodeum with a median

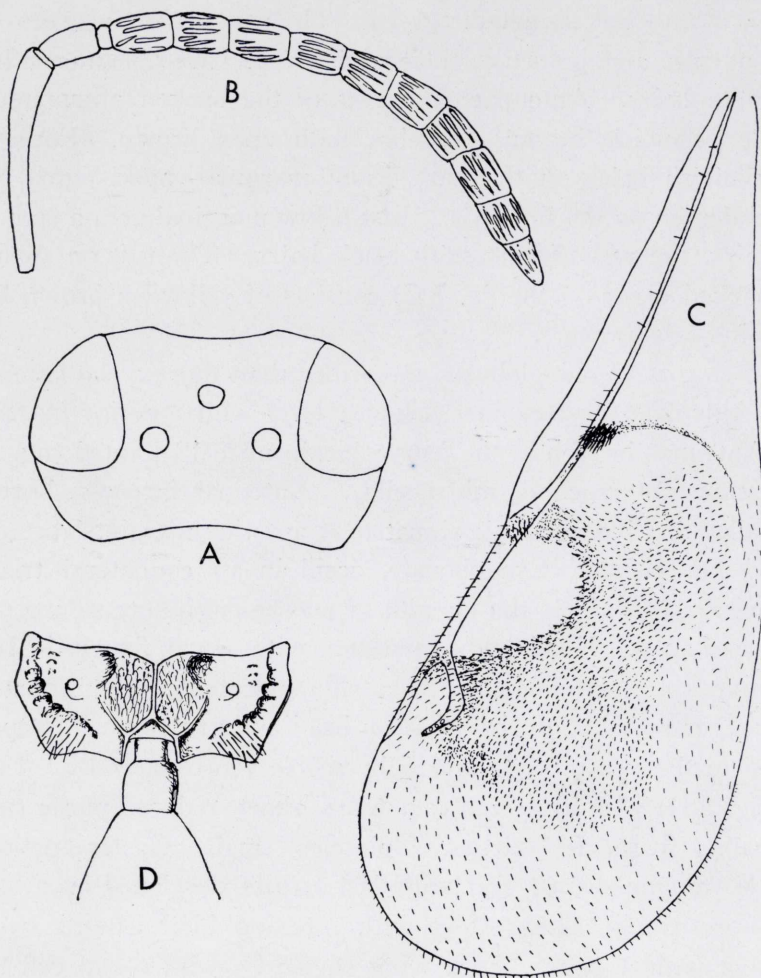


Fig. 5.—*Heydenisca mateui* gen. et sp. nov.: A) Head in dorsal view; B) Antenna; C) Fore wing; D) Propodeum and petiole.

carina and reduced plica. Spiracles small. Gaster petiolate and with protruding terebra. Marginal vein longer than postmarginal vein, the latter longer than stigmal vein ($m:s:pm = 3,5:1,5:2$).

Type *Heydenisca mateui* sp. nov.

Heydenisca mateui sp. nov.

♀. Head, pronotum and gaster yellowish brown. Gaster posterior brown with tint of metallic green. The rest of thorax green with tint of purple, and golden, axillae violet-blue. Mesopleura with silvery, white hairs. Antennae (the rest of the broken antennae) and legs pale yellowish brown. Terebra with apex brown. Fore wing with yellowish hairs on the part below marginal- and stigmal veins (marked denser on the fig. 5 C). Just below marginal vein a spot with white hairs, the rest of disk with black hairs. The tuft on subcostal vein (marked black on the fig. 5 C) consists of yellowish brown hairs. Wing veins pale brown.

Head (fig. 5 A) semiglobular and wider than thorax, the latter flattened. Antennae inserted just below a level with anterior margin of eyes. Antennae broken in the female but in male 13-jointed (fig. 5 B), 11173, scape not reaching mid ocellus. Antennal furrows short and very shallow. Clypeus weak sinuated at anterior margin, labrum not free and not visible. Eye obovate, ocelli in an equilateral triangle. Cheek nearly as wide as the breadth of an eye. Pronotum long, anterior neck-shaped. Head and pronotum with equal fine reticulation. Mesonotum not much longer than scutellum; scutellum and mesonotum with stronger reticulation than that on head and pronotum. Prepectus displaced to the ventral side and only visible ventro-laterally. Propodeum (fig. 5 D) with a median carina and short, reduced plicae (posterior), callus with few hairs. Spiracles small. Gaster petiolated (fig. 5 D), tongue-shaped and with last tergite developed as a stylus. Terebra protruding. Legs stout with fore- and hind femora swollen. Hind tibia with 1 spur. Fore wing (fig. 5 C) with costal cell nude, basal cell also nude, the rest of the wing see fig. 5 C. Marginal vein longer than stigmal ($m:s:pm = 3,5:1,5:2$).

♂. Similar to the female but darker brown posterior of gaster and also with brown maculae on anterior tergites.

Length: ♀ . 2,5-2,7 mm; ♂ . 2,2-2,6 mm.

Holotype: in the collection of Muséum National d'H. N. de Paris. Guelta Arza, Ennedi, N. Tchad, leg. J. Mateu. "Dans le bois sec *Acacia raddiana* parasité par des insectes Xylophages *Buprestidae* and *Bostrychidae*".

Paratype: 1 ♀ + 2 ♂ ♂ from the same locality.

1 ♂ in the same coll. as holotype.

1 ♀ + 1 ♂ in coll. mea.

Heydenisca gen. nov. belongs to the same group as *Heydenia* Först. and *Paraheydenia* Cam. (tribus *Heydenini*) and differs from *Heydenia* Först. and *Paraheydenia* Cam. by not having free labrum. Propodeum and wing veins are also different.

Except above described species are following species known as parasites of the woodboring beetles on *Acacia raddiana* Savi.

Tribus *Cleonymini*.

Pseudocleonymus spinifer Hedqv.

Hedqvist, Mitt. Schweiz. Ent. Ges., 1967.

Qued Trick, Parasite of *Anthaxia angustipennis* Klug. (*Buprestidae*).

Tribus *Ooderini*.

Oodera hoggarensis Hedqv.

Hedqvist, Mitt. Schweiz. Ent. Ges., 1967.

Timesdelssine, Qued Teredjine Hoggar; Qued Dzor, Saoura (Sahara, N. O.).

Subfamily CHALCEDECTINAE.

Chalcedectes niger Hedqv.

Hedqvist, Mitt. Schweiz. Ent. Ges., 1967.

O. Zerhamra, Qued Trick Saoura (Sahara, N. O.), ex *Anthaxia* sp. and *Acmaeodera* sp. (*Buprestidae*).

Chalcedectoides saharensis Hedqv.

Hedqvist, Mitt. Schweiz. Ent. Ges., 1967.

Kheneg et Tlaia, Beni-Abbès, bred from *Anthaxia* sp. and *Acmaeodera* sp. (*Buprestidae*).

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1957. Révision des genres *Chirocera* Latr., *Tanyotorthus* Steff. et *Tanyco-ryphus* Cam. (Hym. Chalcididae). *Ann. Soc. Ent. France*, 126, 139-158.